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In the Matter of)	
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IP-Enabled Services)	WC Docket No. 04-36
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Pac-West Telecomm, Inc. (“Pac-West”) welcomes this opportunity to comment on a regulatory framework for IP-enabled services, including voice services provided by means of the Internet protocol (“VOIP”), that will best serve the public interest.

Founded in 1980, Pac-West provides a variety of voice, data and Internet services to small and medium-sized business enterprises, including 85 percent of the nation's largest Internet service providers, throughout the western United States. Pac-West offers broadband, high-capacity VOIP-based services, using specialized customer premises equipment, that combine packetized voice transmission over public and private networks with messaging, access to personal locator information, Web-based call management and other enhanced features. These service packages, which offer features not available through traditional circuit-switched telephony at a value that circuit-switched services cannot match, confirm Chairman Powell's recent observation that broadband VOIP-based services are causing "an explosion of

competition” that will “remake” the telephone industry and prove “enormously valuable” to consumers.¹

Because Pac-West provides advanced, IP-enabled VOIP-based services that will be directly affected by the outcome of this proceeding, and because the precise boundaries of the broader IP-enabled services universe are evolving and uncertain, these comments focus primarily on the regulatory issues posed by VOIP. As the Notice of Proposed Rulemaking (“NPRM”) recognizes, however, the decisions made in this proceeding will have implications far beyond the VOIP-based issues that have been the focus of recent regulatory attention.² In fact, as reliance on the IP protocol for encoding and transmission of electronic communications continues to grow, the decisions adopted in this proceeding may prove to be the regulatory blueprint, not just for a part of the electronic communications universe, but for substantially all of that universe. For these reasons, the issues raised by this proceeding are as complex and important as any this Commission has ever considered.

In announcing certain guiding principles in the NPRM, the Commission recognized that the benefits of IP-enabled services will be fully achieved only if regulatory interference with this emerging generation of services is kept to a minimum.³ In keeping with this principle, the Commission should put the burden of proof on those who advocate the extension of regulatory burdens to VOIP-based services. Even where proponents of regulation carry their burden of proving that particular variants or providers of VOIP-based service warrant some regulatory

¹ Harry Berkowitz, *Internet Telephony: FCC Chief Touts Phone Service*, Newsday, May 5, 2004, at A55.

² *IP-Enabled Services*, Notice of Proposed Rulemaking, WC Docket No. 04-36, FCC No. 04-28, n.1 and ¶¶ 18-21 (Mar. 10, 2004)(“NPRM”).

³ NPRM ¶ 5, pledging to rely “wherever possible on competition and apply [] discrete regulatory requirements only where . . . necessary to fulfill important policy objectives.” *See also* separate statements of Chairman Powell and Commissioners Abernathy and Martin (Mar. 10, 2004).

oversight, the Commission should avoid reflexive application of the same rules to services and providers that do not require such scrutiny. For example, some level of economic and interconnection regulation may be appropriate for VOIP-based service providers that also control the bottleneck “last-mile” facilities on which those services depend. Rules designed to restrain abuses of market power make no sense, however, when applied to service providers -- such as non-facilities-based VOIP-based providers or competitive local exchange carriers (“CLECs”) -- that lack such power. In an industry as fast-paced and varied as that of Internet telephony, a “one-size-fits-all” approach to regulation will hamper innovation and delay new competition.

The Commission also has recognized that the decisions made in this proceeding must be consistent with the Commission’s ongoing efforts to reform the universal service system and adopt a uniform, rational system of inter-carrier compensation.⁴ Accordingly, the Commission should be especially skeptical of demands that it expand the reach of inefficient rules, such as the present system of interstate access charges and the revenue-based method of assessing universal service contributions, that the Commission is now in the process of reforming. The public interest will be not be served if outmoded regulatory burdens are imposed, even temporarily, on this new generation of services.

As Pac-West explains more fully herein, a careful and pro-competitive analysis of the IP-enabled services market will yield the following conclusions:

- (1) the Commission has jurisdiction over VOIP-based services and can preempt inconsistent state regulation of those services;
- (2) only those VOIP-based service providers that also furnish end-user connections to a public network should contribute to universal service support funds, just as any other service provider that furnishes the end user’s connection to a public network should contribute to those funds;

⁴ See, e.g., NPRM at n.180.

- (3) the legacy access charge regime should not be extended to any provider of VOIP-based information service;
- (4) economic regulation and interconnection obligations should be imposed only on those VOIP-based service providers that control last-mile, bottleneck transport or interconnection facilities;
- (5) consumer protection requirements applicable to telecommunications carriers and services should not apply to VOIP-based information services; and
- (6) E911 and disability access capabilities for VOIP services should continue to develop by means of a market-driven process under the Commission's oversight, with reasonable targets for completion.

The following explains the basis for each of these conclusions in detail.

I. CATEGORIZING IP-ENABLED AND VOIP SERVICES

As the NPRM points out, appropriate regulatory treatment of IP-enabled services requires an understanding of the technical characteristics of those services that have regulatory consequences. In part, the difficulty of characterization results from the versatility of the IP-enabled suite of protocols, which is simply a method of encoding data for efficient, packet-switched transmission. The use of the IP protocol in a communication does not determine the content of the communication, the type of facility over which the communication is transmitted or the business model of the entity or entities that use the IP protocol to transmit, or provide products or services related to, that communication. In fact, the protocol may be used to encode voice, data or video content, and to deliver that content with equal fidelity by wireline telephone facilities, coaxial cable, optical fiber or radio. Similarly, IP-enabled products and services may be offered by common carriers, Internet access providers, vendors of peer-to-peer software, CLECs, cable television companies, wireless telephone service providers and independent vendors of Internet-based IP applications. They may be carried over private networks, proprietary networks on which capacity and services are offered to the public, or the public Internet. Use of the Internet protocol does not confer, enhance or reduce market power, and may

be used by dominant carriers or new entrants. Accordingly, the universe of “IP-enabled services” cuts across all of the categories -- including type of content, type of facility, type of service provider and presence or absence of market power -- on which this Commission’s regulations historically have been based.

VOIP-based services, which are a subset of the IP-enabled services universe, present similarly complex classification issues. Where VOIP-based services are concerned, the Commission should be especially attentive to three fundamental distinctions: (1) the distinction between VOIP-based services that are properly defined as information services and those that may properly be classified as telecommunications services; (2) the distinction between facilities-based and non-facilities based VOIP-based services; and (3) the distinction between facilities-based VOIP-based services that are provided by carriers with market power over the underlying facilities, and those that are provided by CLECs and other competitive providers of telecommunications transport facilities over which those providers lack monopoly power.⁵

The first of these distinctions draws upon a long history of FCC categorization of services as basic or non-basic, and the more recent distinction, in the Telecommunications Act of 1996, between telecommunications services and information services. With very limited exceptions, VOIP-based services fall on the enhanced/information service side of this divide.

Notably, as the Commission pointed out in its 1998 *Report to Congress*, many VOIP-services are computer-based applications carried over the public Internet by Internet access

⁵ These distinctions lend themselves to a three-step regulatory analysis. Specifically, is the service in question a telecommunications service? If yes, does the service provider control the underlying physical network layer facility? If yes, does the service provider have market power in the market for that facility? A “no” answer to any of these questions helps to identify the level of regulation appropriate to the service.

providers.⁶ Provided in this way, VOIP-based service is one application among many that use the ability of Internet access technology to interact with stored data, retrieve messages and perform other functions that the Commission always has treated as enhanced or information services. As the Commission made clear in its 1998 *Report to Congress*, it will not attempt to disentangle particular Internet access applications from other Internet-based applications and label them as “telecommunications services.”⁷ Rather, the Commission should focus its attention on the underlying telecommunications facility upon which the VOIP-based service inevitably rides.

Other variants of VOIP, whether transmitted over the public Internet or over proprietary networks, also include enhanced features that require them to be classified as information services. Some of those services combine Web-based conferencing, voice messaging, text messaging and VOIP in a suite of IP-based services that must be classified, overall, as information services. Most commonly, VOIP-based services perform net protocol conversions between the IP protocol and other encoding/transmission formats, including time division multiplexing and analog telephone signals. This protocol conversion function of VOIP-based service may occur at any of several points in a transmission. In each case, the net protocol conversion performed by the VOIP-based service provider places the VOIP-based service in the deregulated enhanced/information service category.

In fact, the only variant of VOIP-based service that plausibly can be characterized as a telecommunications service is one that is provided strictly between conventional telephones, that does not use Internet access functionality over the public Internet, that includes no enhanced

⁶ *Federal-State Joint Board on Universal Service*, Report to Congress, 13 FCC Rcd 11501, 11543 (1998) (“*Report to Congress*”).

⁷ *Report to Congress*, 13 FCC Rcd at 11539.

features and that performs no net protocol conversion of the format of the end user's voice signal. For example, as the Commission recently found, the specific service at issue in AT&T's declaratory ruling proceeding included each of these characteristics and was properly classified as a telecommunications service.⁸

The second, important distinction among VOIP-based services is between those services provided over the VOIP-based service provider's facilities, and those provided by means of facilities purchased from third-party carriers by the VOIP-based provider or its customer. Many VOIP-based providers, such as Pulver.com, offer only software-based communications capabilities carried on the customer's existing broadband Internet access or other facilities. As we discuss further below, service providers that do not control telecommunications facilities should not be subject to regulations that are based upon such control.⁹

Finally, many VOIP providers, including many CLECs, own some of the facilities over which their VOIP-based services are provided but have no monopoly power in the markets in which those underlying facilities are sold. Although VOIP-based service providers in this category have certain regulatory obligations (such as section 251(b) interconnection obligations) that are based on their ownership of physical network facilities, they should not be subject to common-carrier regulations, including economic regulations, that were developed as a means of preventing monopolistic abuse of customers and competitors.

⁸ *Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges*, WC Docket No. 02-361, FCC 04-97 (Apr. 21, 2004) ("AT&T Order").

⁹ As we discuss further below, regulatory issues involving the distinction between facilities-based and non-facilities-based VOIP service providers can usefully be analyzed under a "layers" model.

II. THE COMMISSION SHOULD ASSERT ITS PLENARY JURISDICTION TO REGULATE VOIP-BASED AND OTHER IP-ENABLED SERVICES

The Commission's jurisdiction extends to all IP-enabled services, including VOIP, and it has the authority to preempt any state regulations that impede the goal of a pro-competitive environment for services employing the IP protocol. In fact, the recent intervention of many states to address VOIP-based services threatens this Commission's policies and requires the active assertion of federal authority in this area.

A. State Regulation Of VOIP-Based Services Has Created Regulatory Uncertainty And Imposed Needless Burdens On Emerging Technologies

Recent state efforts to regulate VOIP-based services have created confusion and uncertainty that must be resolved if VOIP, and other IP-enabled services, are to achieve their full potential. Some states, for example, have required Internet telephony providers to request and obtain certification as intrastate common carriers, even though the provider is clearly an enhanced service provider and not a carrier.¹⁰ Other states have declared that VOIP providers must pay access charges to local carriers for the origination and termination of intrastate VOIP calls.¹¹ Unfortunately, the pendency of this proceeding has not slowed the pace of attempted state oversight of these services. For example, New York State, in a decision announced on May 19, 2004, declared that Vonage Holdings Corporation ("Vonage") is a telephone

¹⁰ *Complaint of the Minn. Dept. of Commerce Against Vonage Holdings Corp. Regarding Lack of Authority to Operate in Minn.*, Docket No. P-6214/C-03-108, Order Finding Jurisdiction and Requiring Compliance (Minn. Public Utilities Comm. Sep. 11, 2003) ("*Minnesota Order*"), *preliminary injunction granted, Vonage Holdings Corp. v. The Minnesota Public Utilities Commission*, 290 F. Supp. 2d 993 (D. Minn. 2003), *stay granted by Order Staying Order of September 11, 2003* (Minn. Public Utilities Comm. Oct. 13, 2003); *Complaint of Frontier Telephone of Rochester, Inc. Against Vonage Holdings Corp.*, Case 03-C-1285, Order Establishing Balanced Regulatory Framework for Vonage Holdings Corporation (NY Public Service Comm. May 21, 2004) ("*New York Vonage Order*").

¹¹ *See Complaint of Frontier Telephone of Rochester against US DataNet Corp.*, Case No. 01-C-1119, Order Requiring Payment of Intrastate Carrier Access Charges (NY Public Service Comm. May 31, 2002).

corporation and must obtain a certificate of public convenience and necessity under New York law.¹²

The requirements that many states are imposing on VOIP service providers are not trivial. In fact, those requirements tend to be costly, anti-competitive and directly contrary to longstanding policies of this Commission. The inconsistency of state regulation is typified by the imposition of intrastate access charges, which tend to include implicit subsidies of the kind this Commission, pursuant to congressional mandate, has been eliminating in the interstate access charge system.¹³ The anti-competitive, anti-innovation character of some state regulation is typified by the recent decision of New York State to require Vonage to file tariffs, which this Commission long ago recognized as an inefficient and anti-competitive practice when applied to non-dominant service providers.¹⁴ Finally, the inconsistency of state regulation with Commission policy appears most strongly in the decision to classify Vonage, which

¹² *Supra*, *New York Vonage Order*. A number of states also have opened proceedings, on their own motion or in response to petitions, to consider their jurisdiction to impose common-carrier regulatory obligations on providers of VOIP-enabled services. *Petition for a Declaratory Order Regarding Classification of IP Telephony Service*, Docket 29016, Order Establishing Declaratory Proceeding (Ala. Public Service Comm. Aug. 29, 2003); *Order Instituting Investigation on the Commission's Own Motion to Determine the Extent to Which the Public Utility Telephone Service Known as Voice over Internet Protocol Should Be Exempted from Regulatory Requirements*, Investigation 04-02-007 (Ca. Public Utilities Comm. Feb. 11, 2004); *Commission Investigation into Voice Services Using Internet Protocol*, Case No. 03-950-TP-COI, Order (Public Utilities Comm. of Ohio Apr. 17, 2003); *Investigation into Voice over Internet Protocol as a Jurisdictional Service*, Docket No. M-00031707, Order (Pa. Public Utility Comm. May 5, 2003).

¹³ *See, e.g., Federal-State Joint Board on Universal Service*, Recommended Decision, CC Docket No. 96-45, FCC 04J-1 (Feb. 27, 2004)(subsequent history omitted).

¹⁴ *See, e.g., Policy and Rules Concerning the Interstate, Interexchange Marketplace, Implementation of Section 254(g) of the Communications Act of 1934, as amended, Second Report and Order*, 11 FCC Rcd 20730 (1996) (subsequent history omitted).

unquestionably offers an information service of the kind this Commission has kept unregulated for decades, as a regulated intrastate carrier.¹⁵

Unless restrained by this Commission, inconsistent and burdensome state regulation, which cannot be confined in any principled way to VOIP-based services alone, will impede the growth of all IP-enabled services.¹⁶ The prospect of litigating state regulatory issues, before public utilities commissions and in the courts, is itself sufficient to deter smaller entities from offering IP-enabled services. And in the long run, the cost of complying with certification requirements and paying intrastate access charges may erase or reduce the cost savings that IP-enabled technology promises to deliver to consumers.

The Communications Act does not require the Commission to acquiesce in this state of affairs. In fact, Congress has made clear, in the Telecommunications Act of 1996, that it expects the Commission to act decisively in defense of Internet-based and computer-interactive services.¹⁷

B. VOIP-Based Services Are Within The Commission's "Interstate Or Foreign" Jurisdiction

The Communications Act grants this Commission authority to regulate "all interstate or foreign communication by wire or radio," but expressly preserves state jurisdiction over "intrastate communication by wire or radio of any carrier"¹⁸ Accordingly, the Commission's

¹⁵ As the Commission points out in the NPRM, the Vonage VOIP service uses customers' existing broadband Internet connections to permit computer-to-computer voice communications among Vonage subscribers, and performs a net protocol conversion when its customers communicate with subscribers to ordinary telephone service. NPRM ¶ 15.

¹⁶ For example, New York State's decision to regulate the Vonage service, which performs a net protocol conversion of the user's communication when delivered to the PSTN, provides a rationale that could be extended to other Internet-based and computer interactive services that the Commission long has recognized as unregulated and subject to exclusive FCC jurisdiction.

¹⁷ 47 U.S.C. § 152(a).

¹⁸ *Id.* § 152(a)-(b).

jurisdiction over particular services, including IP-enabled services, depends upon whether the communications provided by means of those services are interstate or intrastate. The Commission correctly has found that computer-based services in general, and Internet-based services in particular, fall on the interstate side of the jurisdictional line.

One basis for this conclusion is the principle, consistently endorsed by the courts, that communications that originate and terminate in different states are subject to federal jurisdiction.¹⁹ In applying this analysis, the Commission and the courts have rejected efforts to divide interstate transmissions into smaller, intrastate components as a means of defeating federal jurisdiction. Instead, communications services are subjected to an “end-to-end” test under which the ultimate originating and terminating points of an “uninterrupted and properly indivisible” communication are taken into account.²⁰

There is no dispute that many, if not most, VOIP communications are interstate under this end-to-end standard. Sites accessible on the Internet are located all over the world, making it far more probable that any given end-user communication with another VOIP user over an Internet connection is interstate or international rather than intrastate. Similarly, VOIP communication technologies are heavily employed by enterprise customers, many of which are global corporations that make a high proportion of interstate and international calls. And, with the explosive growth of outsourcing, an increasing percentage of IP-based data transfers and telephone conversations occur between different countries.

If the end points of all VOIP communications could be determined, therefore, the preponderance of that traffic likely would be classified as interstate under an end-to-end analysis.

¹⁹ See *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968) (“*Southwestern Cable*”); *General Telephone v. FCC*, 413 F.2d 390 (D.C. Cir. 1969), *cert. denied*, 396 U.S. 888 (1979).

²⁰ *Southwestern Cable*, 392 U.S. at 169.

As the NPRM suggests, however, most IP-enabled services are classic examples of cases where “it [is] impractical or impossible to separate out interstate from intrastate traffic over a shared facility.”²¹ In such cases, the Commission properly has applied a “mixed use” doctrine, according to which a service known to have a substantial but unquantifiable percentage of interstate use is qualified as jurisdictionally interstate.²²

Except for those rare cases in which a VOIP-based service has readily-identifiable geographic points of origination and termination, the Commission should apply its longstanding mixed use standard to assert jurisdiction over those services.²³ Also, the Commission should not require providers of VOIP-based services to implement costly solutions, such as Internet geo-location technologies, merely to defeat federal jurisdiction over some subset of the communications those providers carry or facilitate.²⁴ Similarly, the Commission should not prohibit valuable features, such as non-geographic use of PSTN numbering, simply because those features make it difficult to identify the end points of communications. The Commission should permit VOIP-based services to develop as the market dictates, rather than distort those services for the sake of jurisdictional outcomes that are not legally required or in the public interest.²⁵

²¹ NPRM at n.130.

²² See *GTE Telephone Operating Cos.*, 13 FCC Rcd 22466, 22481; *MTS and WATS Market Structure*, 97 FCC 2d 682 (1983).

²³ AT&T’s VOIP service, for example, originated and terminated calls at geographically specific PSTN destinations.

²⁴ As we discuss below, because of the clear congressional mandate of Section 230 of the Communications Act, federal jurisdiction over all VOIP services is appropriate.

²⁵ However, as the Court of Appeals for the D.C. Circuit concluded, the end-to-end analysis is appropriate only for determining the Commission’s authority to regulate and may not dictate the resolution of any specific regulatory issue. NPRM ¶ 40. See *Bell Atlantic Telephone Cos. v. FCC*, 206 F.3d 1 (D.C. Cir. 2000). So, for example, the Commission’s interstate jurisdiction over Internet-based traffic does not require the Commission to conclude that ISP-bound traffic

C. The Commission Is Empowered To Preempt Inconsistent State Regulation Of IP-Enabled Services

As the NPRM points out, the Supremacy Clause of the U.S. Constitution prevents states from imposing their own requirements in areas that the Congress has chosen to regulate exclusively.²⁶ Congress may show its intention to displace, or preempt, state law by expressing that intention in, or concurrently with the enactment of, a statute,²⁷ or by legislating so comprehensively that no scope for state regulation remains.²⁸

Because the Communications Act includes a reservation of intrastate jurisdiction to the states, FCC preemptions of state regulation generally have not been based upon express congressional authorizations of such preemption. For the most part, this Commission's preemption decisions have been based upon the more complex showing, defined in the Supreme Court's *Louisiana PSC* decision, that a state's action "stands as an obstacle to the accomplishment and execution of the full ... objectives of Congress."²⁹ Under the *Louisiana PSC* test, in the absence of statutory preemption language, the Commission ordinarily may preempt state regulation only where *necessary* (rather than merely helpful) to achieve some valid goal that is within the Commission's jurisdiction under the Act. Even where this requirement is met, the Commission may preempt only those aspects of state regulation that cannot be separated into interstate and intrastate components.³⁰

delivered to Internet service providers that are CLEC customers is ineligible for reciprocal compensation under carrier interconnection agreements.

²⁶ U.S. Const. Art. VI.

²⁷ *Jones v. Rath Packing Co.*, 430 U.S. 519 (1977) *rehearing denied* 431 U.S. 925 (1977).

²⁸ *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218 (1947).

²⁹ *La. Public Service Comm'n v. FCC*, 476 U.S. 355, 369 (1986).

³⁰ *Id.*

Even if the 1996 Act had not confirmed Congress's intention to keep the Internet and computer-based services free of regulation, much of the new and pending state regulation of VOIP-based services would fail under the *Louisiana PSC* preemption standard. Notably, the goal of promoting the growth of VOIP and other IP-enabled services is valid and within this Commission's jurisdiction. In fact, that goal is a natural extension of the Commission's policy, beginning at least as early as the *Computer Inquiry* proceedings, to promote the public benefits of advanced, computer-based services.³¹ Throughout the lengthy course of appellate litigation concerning those proceedings, no court questioned the public-interest value of the Commission's deregulatory policy.³² Similarly, state imposition of common-carrier regulation, access charge obligations and other regulatory requirements will impede the growth of VOIP services; and separation of those services into interstate and intrastate components, for the purpose of enabling dual federal-state regulation of those services, is neither feasible nor desirable.³³

In the case of VOIP-based and other IP-enabled services, however, the Commission has a more direct basis for preemption than a demonstration that particular state regulations cannot be reconciled with its legitimate policy goals. Congress has given this Commission a specific mandate that effectively requires preemption of restrictive and inefficient state regulation.

³¹ See *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, Notice of Inquiry, 7 FCC 2d 11 (1966); *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, Final Decision and Order, 28 FCC 2d 267 (1971); *Amendment of Section 64.702 of the Commission's Rules and Regulations*, Tentative Decision and Further Notice of Inquiry and Rulemaking, 72 FCC 2d 358 (1979); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry Final Decision)*, 77 FCC 2d 389 (1980); *Amendment of Section 64.702 of the Commission's Rules and Regulations, (Third Computer Inquiry) Report and Order*, 104 FCC 2d 958 (1986).

³² See, e.g., *State of California et al. v. Federal Communications Commission*, 905 F.2d 1217 (9th Cir. 1990)(subsequent history omitted).

³³ See discussion at p. 12, concerning the infeasibility of separating IP-enabled communications into interstate and intrastate components.

Specifically, section 230 of the Communications Act, enacted in 1996, declares the “policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation”³⁴ At least three features of this language confirm the comprehensiveness of section 230’s deregulatory mandate.

First, section 230 declares Congress’s intention to preserve the “vibrant and competitive free market *that presently exists* for the Internet and other interactive computer services”³⁵ Therefore, any regulatory initiative that alters the competitive environment that these services enjoyed as of February, 1996, when section 230 was enacted, is directly contrary to the expressed intent of Congress. The recent state efforts to regulate VOIP-based services, all of which began after 1996, directly challenge this national policy.

Second, section 230’s expression of congressional opposition to state, as well as federal, regulation of Internet and computer-based services creates an explicit exception to the Act’s more general reservation of state jurisdiction over intrastate communications. With this language, Congress directly empowers -- and in fact requires -- the Commission to preempt state regulations that are contrary to this statement of federal policy.

Finally, section 230’s scope is not confined to services provided over the Internet, but extends to all “interactive computer services,” which the Act defines to include any information service, system or access software provider that “provides or enables computer access by multiple users to a computer server”³⁶ This definition is broad enough to encompass effectively all VOIP-based services that use proprietary or private networks rather than the

³⁴ 47 U.S.C. § 230(b)(2).

³⁵ *Id.* (emphasis added).

³⁶ *Id.* § 230(f)(2).

public Internet, as well as providers of peer-to-peer VOIP-based services based entirely on software that permits access to the servers of an application provider or an Internet access provider. Accordingly, the preemptive mandate of section 230 encompasses essentially all VOIP-based services. The Commission should not hesitate to preempt state regulations that make the IP-enabled services market less “vibrant and competitive.”

Finally, this Commission’s jurisdiction over VOIP-enabled services does not affect the jurisdiction of the states to regulate intrastate telecommunications facilities and services, including the states’ ability to enforce the obligations of carriers to make such facilities and services available on reasonable terms and conditions, and to ensure that incumbents comply with the terms of interconnection agreements entered into with incumbent carriers.

III. PROVIDERS OF VOIP-BASED SERVICES SHOULD NOT BE REQUIRED TO CONTRIBUTE DIRECTLY TO THE PRESENT UNIVERSAL SERVICE SYSTEM

Among the most complex questions raised in the NPRM is the relationship between IP-enabled services and the Commission’s evolving system for support of universal service. As the NPRM points out, these issues are not new. At least as early as its *1998 Report to Congress* and continuing through the recent Wireline Broadband proceeding, the Commission has reacted to public and congressional concern that VOIP-based services, in particular, might erode support for universal service by avoiding the contribution obligations that apply to older, analog and circuit-switched communications technologies.³⁷ In the NPRM, the Commission again addresses this concern by asking whether it should “exercise its permissive authority [to require universal

³⁷ *Report to Congress*, 13 FCC Rcd at 11501; *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 17 FCC Rcd 3019 (2002).

service contributions from] facilities-based and non-facilities-based providers of IP services,” and how it might exercise that authority in an equitable and nondiscriminatory fashion.³⁸

The Commission can protect and promote the universal service system without discouraging the deployment of VOIP technology. Reforms to the contribution methodology now under consideration, including a possible transition to a connection-based approach, will advance these goals. Regardless of the contribution method the Commission adopts, however, the contribution obligations of particular VOIP-based services will continue to be defined by section 254 of the Act. Section 254 does not permit the Commission to impose direct contribution obligations on non-facilities-based providers of VOIP-based services.³⁹

A. The Commission May Not Require Non-Facilities-Based Providers Of VOIP-based And Other IP-Enabled Services To Contribute Directly To The Universal Service System

As the NPRM points out, section 254 of the Act creates two categories of potential contributors to universal service support funds. The “mandatory” category consists of telecommunications carriers, which must contribute to those funds if they provide interstate telecommunications service.⁴⁰ The “permissive” category consists of other providers of telecommunications services, including non-carrier providers, which “should” contribute to universal service support mechanisms on an equitable and nondiscriminatory basis.⁴¹ Both categories -- the mandatory and the permissive -- are defined to include only providers of telecommunications services and make no reference to information service providers (“ISPs”).

³⁸ NPRM ¶ 64.

³⁹ As noted below, IP-enabled information service providers indirectly support the system in the prices they pay for telecommunications inputs to their service, which include the cost of the vending carriers’ universal service contributions.

⁴⁰ 47 U.S.C. § 254(d).

⁴¹ *Id.* § 254(b)(4).

As the Commission pointed out in its *1998 Report to Congress*, telecommunications services and information services, as defined in the Act, are mutually exclusive categories.⁴² In other words, the Act creates an all-or-nothing scheme for deciding which services will support the obligation to contribute to universal service funds: *i.e.*, a service that meets the definition of an information service may not also be treated as a telecommunications service for the purpose of imposing direct universal service contribution obligations on the provider of that service.

Under this definitional scheme, a non-facilities-based provider of any service, including a VOIP or other IP-enabled service, that performs a net protocol conversion or otherwise offers “a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications” may not be required to contribute to universal service funds.⁴³ Because the capabilities provided to the customer by such a service constitute an information service, no contribution obligation may be based upon that service; and because the telecommunications inputs that support that information service are obtained from a third-party carrier or carriers, those inputs may not be attributed to the information service provider (“ISP”) for purposes of assessing universal service contribution obligations.⁴⁴

The imposition of contribution obligations on non-facilities-based ISPs also is not required to ensure that the telecommunications component of the service supports the universal service system. As the Commission pointed out in 1998, a carrier providing leased lines to an

⁴² *Report to Congress*, 13 FCC Rcd at 11520.

⁴³ 47 U.S.C. § 153(20).

⁴⁴ Pulver.com’s Free World Dial-up (“FWD”) service offers a good example of a service that would not be subject to universal service contribution obligations under this analysis. As the Commission found, FWD is an information service that offers Internet-based VOIP capability along with such enhanced functions as storage and retrieval of member information. The Commission also found that Pulver.com provides none of the transport facilities used by its members, but instead relies upon the members’ existing broadband Internet access connections.

ISP “must include the revenues derived from those lines in [its] universal service contribution base,” and the information service provider supports the system indirectly by paying a rate to the carrier that includes the carrier’s universal service contribution.⁴⁵

For all of these reasons, the Commission should confirm that any IP-enabled service that meets the definition of an information service, and is provided over telecommunications services or facilities acquired from another service provider, will not be required to contribute directly to the universal service fund. Specifically, the question posed in the NPRM, whether non-facilities based providers of IP-enabled services that are determined to be information service should be required to contribute to universal service, must be answered “NO.”⁴⁶

**B. Facilities-Based Providers Of IP-Enabled Information Services
Should Not Be Required To Contribute Directly To The Universal
Service Fund**

The question of responsibility for universal service contributions becomes more complex when an ISP “owns transmission facilities, and engages in data transport over those facilities in order to provide an information service.”⁴⁷ In its *Report to Congress*, the Commission suggested that it may be appropriate to require these facilities-based entities to contribute to universal service support as members of the permissive, non-carrier category of contributors.⁴⁸ The Commission also acknowledged, however, that calculation of the amounts owed would be difficult under the revenue-based contribution approach.⁴⁹ Perhaps because of those difficulties,

Accordingly, FWD is a non-facilities-based, IP-enabled information service that cannot be assessed contributions for support of the universal service system.

⁴⁵ *Report to Congress*, 13 FCC Rcd at 11533.

⁴⁶ NPRM ¶ 64.

⁴⁷ *Report to Congress*, 13 FCC Rcd at 11534.

⁴⁸ *Id.*

⁴⁹ *Id.*

the Commission has taken no subsequent action to assess universal service contribution obligations on facilities-based providers of VOIP-based services.

The Commission should not at this time extend its revenue-based contribution system to ISP self-providers of telecommunications services. Instead of undertaking this complex and ultimately arbitrary exercise, the Commission should adopt a connection-based contribution system. Under that system, if a facilities-based ISP provides its user with a connection or connections to a public network, then it will contribute to the universal service fund according to the number and capacity of such connections.

The connection-based approach offers two principal advantages over the revenue-based approach to universal service contribution obligations of ISPs that self-provide the underlying telecommunications inputs to their information services.

First, the connection-based approach identifies the assessable “telecommunications” element of an IP-enabled service in a way that satisfies section 254 and conforms to the technical reality of such services. As MCI’s White paper describing the “Network Layers Model” of IP service regulation explains, VOIP and other IP-enabled communications technologies are built upon a horizontal, multi-level architecture.⁵⁰ VOIP service, for example, is an application-level service that requires physical access and transport facilities in order to carry customer communications. Above this physical network layer but still (depending upon the version of the layered model one applies) two layers below the VOIP application, is a logical network layer

⁵⁰ Richard S. Whitt, *A Horizontal Leap Forward: Formulating a New Public Policy Framework Based on the Network Layers Model* (MCI Public Policy Paper, Mar. 2004) (“White Paper”). As the White Paper points out, the major proponents of the “layered” approach have described many variants of the model. Although the number of proposed service layers and their definitions vary, the central insight of the approach has been, for decades the accepted framework for development of international communications protocols. White Paper at 12, describing the Open System Interconnection Reference Model of the International Organization for Standardization (“ISO”), developed in 1978.

consisting of the packet switching software that routes the VOIP service over the physical network facilities. This logical network layer, in turn, directly supports the VOIP application, which is only one of many applications that might “ride” on the packet switching capability of the logical network layer. The VOIP application, in turn, supports the particular content of users’ conversations (that is, the content layer of the service).

Several versions of the layered model have been proposed, with varying numbers and definitions of the constituent layers into which communications might be divided. No matter which version of the layered model is applied, however, every IP-enabled service will include a physical network layer that corresponds to the access and transport facilities (local exchange, interoffice and long-haul conduit facilities) typically provided by telecommunications carriers, including the process by which communications are carried over those access and transport facilities “without change in the form or content of the information as sent and received.”⁵¹ Accordingly, it is entirely consistent with section 254 of the Act to require providers of network interconnections at the physical network layer, which match the Act’s definition of telecommunications services, to contribute to universal support mechanisms -- either as “telecommunications carriers” (when the physical network layer inputs are furnished by carriers to ISPs for use in providing information services) or as non-carrier telecommunication service providers (when the physical network layer inputs are self-provided by ISPs as inputs to their own information services).

The second advantage of the connection-based approach is its simplicity when compared with the artificial exercise of attributing some portion of an ISP’s revenue from an information service to the underlying telecommunications component. With the connection-based approach, a service provider that furnishes a particular kind, quantity and capacity of connections to a

public network will pay the same amount to the universal service fund, regardless of revenues earned.

C. Providers Of VOIP-based Telecommunications Services Should Contribute To Universal Service Support On A Per-Connection Basis

As the Commission found in its recent Order denying AT&T's petition for declaratory ruling, not all IP-enabled services are properly classified as information services. If, for example, a VOIP service performs no net protocol conversion and provides its users with no other enhanced functionality of any kind, that service properly may be classified as a telecommunications service.⁵²

Services that consist only of functionalities defined as "telecommunications" in the Act may properly be required to contribute to the universal service fund, even where those services transport communications that are encoded in the Internet protocol. For the reasons already stated, however, those universal service contribution obligations should be based upon the number and capacity of connections to a public network that the service provider furnishes to the end user.

IV. THE PRESENT SYSTEM OF ACCESS CHARGES SHOULD NOT BE EXTENDED TO PROVIDERS OF VOIP-BASED INFORMATION SERVICES

The Commission also seeks comment on "the extent to which access charges should apply to VOIP or other IP-enabled services."⁵³ In addressing this question, the Commission asks commenters to apply the principle that "the cost of the PSTN should be borne equitably among those that use it in similar ways."⁵⁴

⁵¹ 47 U.S.C. § 153(43), defining "telecommunications."

⁵² *Supra AT&T Order.*

⁵³ *NPRM* ¶ 61.

⁵⁴ *Id.*

The Commission's goal of equitable, rational recovery of the costs of the PSTN from its users will not be served by mechanically extending the present regime of access charges to all VOIP-based services. As the Commission has pointed out, the present access charge regime is inefficient because "in order to keep telephone rates low, access charges traditionally have exceeded the forward-looking economic costs of providing access services."⁵⁵ As the Commission also has pointed out, interstate access charges vary drastically from intrastate access charges, reciprocal compensation rates and commercial mobile radio service ("CMRS") interconnection charges that are intended to recover the costs of similar PSTN facilities and services. For these reasons, we support the Commission's efforts to replace the access charge regime with a set of cost-based charges that do not discriminate on the basis of artificial distinctions among local, interexchange and other service categories that impose the same costs on the system but incur widely varying charges under the present rules.

A number of approaches to unitary intercarrier compensation might be considered. For example, the Cost-Based Intercarrier Compensation Coalition ("CBICC") recommends an orderly transition to a unitary compensation rate for origination and termination of circuit-switched traffic between licensed common carriers.⁵⁶ Among other provisions, the CBICC plan proposes an initial transition period during which interstate access rates will decline to an economically efficient baseline rate, followed by a second transition period during which intrastate access charges also will decline to a cost-based baseline rate.⁵⁷ Loss of carrier

⁵⁵ NPRM at n.178; *see Developing a Unified Intercarrier Compensation Regime*, Notice of Proposed Rulemaking, 16 FCC Rcd 9610 (2001).

⁵⁶ *See* CBICC Press Release, *Cost-Based Intercarrier Compensation Coalition Announces Proposal* (May 11, 2004). In this release, John Sumpter, Vice President-Regulatory of Pac-West, points out that the CBICC proposal "eliminates the opportunity for arbitrage of the compensation rules, simplifies the intercarrier compensation rules and avoids future litigation."

⁵⁷ *Id.*

interstate access charge revenues during the initial transition will be partially offset by a capped increased in subscriber line charges (“SLC”). When the permanent compensation plan proposed by CBICC is in place, VOIP traffic that originates or terminates on a circuit switch will be subject to compensation payment obligations if exchanged by carriers as circuit-switched traffic.

The CBICC plan offers a reasonable framework for the Commission’s treatment of VOIP-based services for purposes of intercarrier compensation. Until the present intercarrier compensation inquiry is resolved, the Commission should advance the congressional policy of promoting the Internet and computer-based services by confirming the longstanding exemption of information services, including VOIP-based services that provide protocol conversion or other enhanced functionality, from access charge requirements. For particular services, such as the VOIP service described in AT&T’s declaratory ruling petition, that do not meet the statutory definition of information service, imposition of access charges will be appropriate while the Commission’s intercarrier compensation inquiry proceeds.

When the intercarrier compensation inquiry is completed, and regardless of the specific, unified compensation regime that is adopted, the Commission should make clear that intercarrier compensation obligations, however defined, will apply only to those VOIP service providers that also own and control the physical network layer at which interconnections between carrier networks are implemented.⁵⁸ When a VOIP service provider obtains physical network services and facilities from a carrier, that carrier compensates other carriers for exchange of traffic and the VOIP service provider supports the PSTN indirectly in the rates that it, or its customer, pays for network services. Accordingly, imposition of intercarrier compensation obligations directly on VOIP-based services that offer only application-layer services will result in over-

⁵⁸ *Supra*, *White Paper*.

compensation of carriers for use of the PSTN and will place a needless burden on providers of IP-enabled services.⁵⁹

V. SPECIFIC PUBLIC SAFETY AND ACCESS OBLIGATIONS FOR IP-ENABLED SERVICE PROVIDERS ARE PREMATURE

In the NPRM, the Commission asks whether “it may be appropriate to impose a requirement that some or all IP-enabled voice services provide 911 functionality to consumers and seek comment on this proposal.”⁶⁰ In the alternative, the Commission asks whether “consideration should be given to refraining from imposing E911 or related regulatory obligations on IP-enabled services until those services are better established and more widely adopted by consumers.”⁶¹

Pac-West welcomes the Commission’s oversight in the effort, which Pac-West fully supports, to use IP technologies to support and improve emergency services. The recent voluntary agreement of the National Emergency Number Association and the Voice on the Net Coalition, concerning means by which VOIP customers may obtain access to E911 services, demonstrates that the VOIP services industry is working toward implementation of emergency calling capabilities.⁶² As the Commission recognizes, technological developments in uses of Internet-based and computer-based services may result in emergency notification services that

⁵⁹ This approach is consistent with the CBICC proposal, which applies the reformed “baseline” compensation charges only to VOIP providers that originate or terminate traffic on a circuit switch. Because only the entity that controls the physical network connection between carriers originates or terminates traffic, a VOIP service provider that furnishes only a software application transported over a carrier’s interconnected facility would not pay intercarrier compensation under the CBICC proposal.

⁶⁰ NPRM ¶ 57.

⁶¹ *Id.*

⁶² VON Coalition and National Emergency Number Association Press Release, *Public Safety and Internet Leaders Connect on 911* (Dec. 1, 2003).

are superior to those already mandated by the Commission's E911 requirements.⁶³ Rather than impose specific existing requirements now that are based on circuit-switched technology and may become obsolete as technology advances, the Commission should permit this market-driven process to continue.

The NPRM also asks whether current disability access requirements should be extended to IP-enabled services.⁶⁴ As the record in the pending Notice of Inquiry on this subject shows, VOIP and other IP-enabled services are uniquely suited to expand the communications potential of persons with disabilities, and should be permitted to develop without undue regulatory interference.

VI. SUFFICIENT NON-COMMON CARRIER CONSUMER PROTECTION OBLIGATIONS ALREADY APPLY TO PROVIDERS OF VOIP AND OTHER IP-ENABLED SERVICES

The Commission also asks, in the NPRM, whether certain consumer-protection regulations should apply to IP-enabled services. Specifically, the Commission asks about the applicability to such services of consumer proprietary network information ("CPNI") rules, the entry/exit regulations of section 214 of the Act, the anti-slamming rules, truth-in-billing requirements and operator services rules.⁶⁵

The consumer protection rules identified in the NPRM should apply only to telecommunications carriers to the extent they are providing telecommunications services, and need not be specifically extended to VOIP and other IP-enabled services that meet the definition of information services or are provided by non-carrier entities. The subject rules, themselves, make clear that they apply to telecommunications services offered by telecommunications

⁶³ NPRM ¶ 53.

⁶⁴ *Id.* ¶ 58.

⁶⁵ *Id.* ¶ 72.

carriers, and the Commission has not suggested that IP-enabled service providers have abused customers in ways that require this Commission’s intervention.

So, for example, the CPNI requirements expressly apply to “telecommunications carriers” that receive or obtain CPNI in connection with “telecommunications service.”⁶⁶ Similarly, the slamming requirements apply to “telecommunications carrier[s]” providing “telephone exchange service or telephone toll service”;⁶⁷ the truth-in-billing rules expressly apply to “telephone bills” rendered in connection with “telephone service;”⁶⁸ and the operator services provisions of the Act apply only to an “interstate telecommunications service . . . that includes . . . any automatic or live assistance to a consumer to arrange for billing or completion, or both, of an interstate telephone call”⁶⁹

Few, if any, IP-enabled services fall within the scope of these definitions. For those IP-enabled services that may, however, be defined by the Commission as “telecommunications services,” the Commission should apply the relevant rules only if the IP-enabled service provider’s market power or other factors allow it to abuse consumers. Otherwise, the Commission should use its forbearance authority to relieve IP-enabled service providers from these obligations.

Finally, there is no reason to believe that IP-enabled service providers that engage in fraudulent or misleading practices will be immune from appropriate remedies. Information service providers are subject to the authority of the Federal Trade Commission and of the states, which are fully empowered to regulate unfair or deceptive acts or practices.

⁶⁶ 47 U.S.C. § 222.

⁶⁷ *Id.* § 258.

⁶⁸ 47 C.F.R. § 64.708(i).

⁶⁹ 47 U.S.C. § 226(a)(7).

VII. COMMON-CARRIER REGULATION SHOULD APPLY ONLY TO SERVICE PROVIDERS WITH MARKET POWER

Entry/exit regulation, rate regulations, section 251(c) obligations and other requirements that were developed as a means of controlling dominant carriers' power generally should not be applied to providers of VOIP and other IP-enabled services that lack such power. A decision to impose such obligations would signal a needless retreat from the Commission's longstanding policy of deregulating service providers that lack market power, including providers of enhanced/information services. Because most VOIP-based services, in particular, are offered as application-layer services by entities that do not control bottleneck facilities, or by CLECs that may control physical network layer facilities but have no market power in any market, economic regulation of those providers would be a needless burden with no potential to protect consumers.

However, where a provider of VOIP or other IP-enabled service also controls the physical network facilities over which that carrier and its competitors provide such services; and where those facilities are part of a local exchange bottleneck; the common-carrier regulations already in place should be applied to prevent abuse of consumers and competitors.⁷⁰

⁷⁰ Ultimately, a rational scheme of telecommunications regulation will impose common-carrier obligations only on entities that control physical network facilities, and will impose minimal regulations on entities that control such facilities but lack market power.

CONCLUSION

The present proceeding is an opportunity for this Commission to bring clarity to an industry that is significantly hampered by conflicting regulatory signals at both the state and federal levels. Pac-West urges the Commission to assert its jurisdiction over IP-enabled services and use that jurisdiction to promote a competitive environment in which the benefits of those services can be fully realized.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Theresa Rollins, do hereby certify that I have on this 28th day of May, 2004, had copies of the foregoing **REPLY COMMENTS** delivered to the following via electronic mail:

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